Comparisons of Job Characteristics

Focus Occupation: Statisticians (15-2041)

Associated Occupation: Epidemiologists (19-1041)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Statisticians (15-2041)

Associated Occupation: Epidemiologists (19-1041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Mathematics	9.2	18.7	15.7	<	Expanded education and/or training may be required	
English Language	11.2	17.6	14.2	<<	Extensive education and/or training may be required	
Biology	3.7	16.5	7.1	<<	Extensive education and/or training may be required	
Medicine and Dentistry	3.7	12.7	6.2	<<	Extensive education and/or training may be required	
Sociology and Anthropology	4.1	11.6	2.8	<<	Extensive education and/or training may be required	
Geography	3.9	8.8	3.1	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation:

Focus Occupation: Statisticians (15-2041)

Associated Occupation: Epidemiologists (19-1041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Science	4.5	18.2	10.6	Extensive deve	elopment of skills in this equired
Reading Comprehension	10.7	16.7	14.0	A higher skill level may be required	
Active Listening	11.0	14.6	12.2	A higher skill le	evel may be required
Critical Thinking	10.8	14.6	14.6	Current skill le	vel may be sufficient
Writing	9.2	14.3	12.8	A higher skill le	evel may be required

Complex Problem Solving	9.1	13.9	11.9	<	A higher skill level may be required	
Judgment and Decision Making	9.4	13.9	11.9	<	A higher skill level may be required	
Monitoring	9.9	13.3	11.1	<	A higher skill level may be required	
Active Learning	8.7	13.0	12.0	0	Current skill level may be sufficient	
Coordination	9.1	11.8	9.3	<	A higher skill level may be required	
Systems Analysis	6.5	11.8	9.0	<<	Extensive development of skills in this area may be required	
Systems Evaluation	6.4	11.5	8.1	<<	Extensive development of skills in this area may be required	
Mathematics	6.2	11.0	15.7	>>	Skill level is likely more than sufficient	
Operations Analysis	5.0	9.5	8.6	<	A higher skill level may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 96

Focus Occupation: Statisticians (15-2041)

Associated Occupation: Epidemiologists (19-1041)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Oral Comprehension	12.5	16.4	14.2	<	Some improvement in abilities may be required	
Problem Sensitivity	11.1	16.2	12.8	<<	Extensive improvement in abilities may be required	
Written Comprehension	11.0	16.0	14.4	<	Some improvement in abilities may be required	
Oral Expression	12.4	15.7	14.0	<	Some improvement in abilities may be required	
Inductive Reasoning	10.2	15.2	14.4	0	Current ability level may be sufficient	
Written Expression	9.8	15.0	13.9	0	Current ability level may be sufficient	
Deductive Reasoning	10.6	14.6	15.4	0	Current ability level may be sufficient	
Category Flexibility	9.0	12.2	12.2	0	Current ability level may be sufficient	
Fluency of Ideas	7.6	11.8	9.6	<	Some improvement in abilities may be required	
Mathematical Reasoning	6.3	11.5	16.1	>>	Current ability level is likely more than sufficient	
Number Facility	6.3	11.0	13.0	>	Current ability level is likely sufficient	
Memorization	5.6	8.4	6.8	<	Some improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 85

Focus Occupation: Statisticians (15-2041)

Associated Occupation: Epidemiologists (19-1041)

Work Activities	Exclusivity of Activity
Advise governmental or industrial personnel	28
Analyze scientific research data or investigative findings	27
Collect scientific or technical data	30
Collect social or personal information	70
Collect statistical data	47
Communicate technical information	4
Confer with research personnel	50
Confer with scientists	54
Develop or maintain databases	30
Develop policies, procedures, methods, or standards	21
Develop tables depicting data	33
Explain complex mathematical information	30
Make presentations	13
Perform statistical analysis	71
Plan scientific research or investigative studies	48
Plan surveys of specified group or area	80
Prepare reports	8
Prepare technical reports or related documentation	22
Provide expert testimony on research results	66
Recommend further study or action based on research data	60
Use computers to enter, access or retrieve data	3
Use knowledge of investigation techniques	16
Use mathematical or statistical methods to identify or analyze problems	30
Use quantitative research methods	35
Use relational database software	26
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17
Write scholarly or technical research papers	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 94

Focus Occupation: Statisticians (15-2041)

Associated Occupation: Epidemiologists (19-1041)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Data management and query software	1

Industry specific software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.